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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,672	08/15/2001	Mihaela Van Der Schaar	US010212	3218
24737	7590	04/25/2007	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			WONG, ALLEN C	
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SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)
	09/930,672	SCHAAR ET AL.
	Examiner	Art Unit
	Allen Wong	2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 February 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-36 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 2/1/07 have been fully read and considered but they are not persuasive.

Regarding pages 7-8 of applicant's remarks, applicant asserts that the double patenting rejection should be withdrawn. The examiner respectfully disagrees. Although the conflicting claims are not identical, they are not patentably distinct from each other because the combination of claims 1 and 3 of the present invention is equivalent to claim 1 of copending Application No. 09/793,035, where Wu (US 6,614,936) can be combined to teach that there can be at least a fractional bit plane, as noted in Wu's figure 9. In a similar manner, the combination of claims 25 and 27 of the present invention is equivalent to claim 9 of copending Application No. 09/793,035, as well as the combination of claims 13 and 15 of the present invention is equivalent to claim 11 of copending Application No. 09/793,035. Claim 7 of the present invention is nearly identical to claim 5 of copending Application No. 09/793,035, claim 19 of the present invention is nearly identical to claim 12 of copending Application No. 09/793,035, and claim 31 of the present invention is nearly identical to claim 10 of copending Application No. 09/793,035. Because the limitations are similar to one another, the double patenting rejection is reasonably made. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. A terminal disclaimer can be submitted to overcome the double patenting rejection.

Regarding page 8-9 of applicant's remarks, applicant states that claims 13-24 is amended to the manner as stated in the previous rejection from 11/2/06. The examiner respectfully disagrees. The previous Office Action sent on 11/2/06 specifically states that the preamble of the independent claims 13 and 19 should be amended to state "a computer-readable medium encoded with computer programmable executable instructions, the computer-readable medium comprising:". The preamble of the currently amended claims 13 and 19 state "a computer-readable memory medium containing software instructions", whereas the examiner's specific suggestion is "a computer-readable medium encoded with computer programmable executable instructions", with the emphasis on the terms "encoded with" used in conjunction with the term "computer executable instructions". Thus, the 35 U.S.C. 101 rejection to claims 13-24 is sustained.

Regarding the last line on page 9 and lines 10-14 on page 10 of applicant's remarks, applicant states that the combination of Wu and Xin is improper because of fundamentally different procedures. The examiner respectfully disagrees. In response to applicant's argument that Wu and Xin is "fundamentally different" or nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wu and Xin as a whole for yield high encoding efficiency and

good error recovery during data transmission over the Internet and wireless channels, as disclosed in Xin's paragraph 0014.

Since both Wu and Xin involve the concepts as disclosed in the same, analogous MPEG video encoding/decoding environment, thus, the combination of Wu and Xin is considered to be reasonably combinable to any one of ordinary skill in the art to implement as a whole.

Regarding lines 21-25 on page 10 of applicant's remarks, applicant contends that Xin does not disclose "a fractional bitplane of an associated enhancement layer reference frame". The examiner respectfully disagrees. In figure 10, Xin teaches the use of fractional bit planes, wherein BIT-PLANE 0 is one fractional bit plane, BIT-PLANE 1 is the second fractional bit plane, BIT-PLANE 2 is the third fractional bit plane, and BIT-PLANE 3 is the fourth fractional bit plane. Xin discloses these fractional bit planes (BIT-PLANE 0-3) of the frame images are encoded according to a layered scheme. Thus, Xin teaches the limitation of the fractional bit plane of an associated enhancement layer reference frame. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wu and Xin as a whole for yield high encoding efficiency and good error recovery during data transmission over the Internet and wireless channels, as disclosed in Xin's paragraph 0014.

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Regarding lines 26-29 on page 10 of applicant's remarks, applicant states that neither Wu nor Xin, alone or in combination, disclose or suggests "each of the extended base layer reference frames including a base layer reference and at least a fractional bitplane of an associated enhancement layer reference frame", as recited in claims 1, 7, 13, 19, 25 and 31. The examiner respectfully disagrees. In figure 4, Wu discloses that each of the extended base layer reference frames includes data from a base layer, ie. the extended baser layer frames 3 and 5 from 1st layer, where these frames are generated from a base layer reference frame and at least a portion of an associated enhancement layer reference frame. Thus, Wu discloses each of the extended base layer reference frames including a base layer reference frame and at least a portion of an associated enhancement layer reference frame. Wu does not specifically disclose the fractional bit plane of an associated enhancement layer reference frame. However, in figure 10, Xin teaches the use of fractional bit planes, wherein BIT-PLANE 0 is one fractional bit plane, BIT-PLANE 1 is the second fractional bit plane, BIT-PLANE 2 is the third fractional bit plane, and BIT-PLANE 3 is the fourth fractional bit plane. Xin discloses these fractional bit planes (BIT-PLANE 0-3) of the frame images are encoded according to a layered scheme.

Thus, Xin teaches the limitation of the fractional bit plane of an associated enhancement layer reference frame. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wu and Xin as a whole for yield high

encoding efficiency and good error recovery during data transmission over the Internet and wireless channels, as disclosed in Xin's paragraph 0014.

Dependent claims 2, 3, 6, 8, 9, 12, 14, 15, 18, 20, 21, 24, 26, 27, 30, 32, 33 and 36 are rejected for similar reasons as independent claims 1, 7, 13, 19, 25 and 31.

Regarding the last paragraph on page 11 of applicant's remarks, applicant asserts that DeBonet does not disclose "each of the extended base layer reference frames including a base layer reference frame and at least a fractional bitplane of an associated enhancement layer reference frame," as recited in claims 1, 7, 13, 19 ,25 and 31. The examiner respectfully disagrees.

In figure 4, Wu discloses that each of the extended base layer reference frames includes data from a base layer, ie. the extended baser layer frames 3 and 5 from 1st layer, where these frames are generated from a base layer reference frame and at least a portion of an associated enhancement layer reference frame. Thus, Wu discloses each of the extended base layer reference frames including a base layer reference frame and at least a portion of an associated enhancement layer reference frame. Wu does not specifically disclose the fractional bit plane of an associated enhancement layer reference frame. However, in figure 10, Xin teaches the use of fractional bit planes, wherein BIT-PLANE 0 is one fractional bit plane, BIT-PLANE 1 is the second fractional bit plane, BIT-PLANE 2 is the third fractional bit plane, and BIT-PLANE 3 is the fourth fractional bit plane. Xin discloses these fractional bit planes (BIT-PLANE 0-3) of the frame images are encoded according to a layered scheme.

Thus, Xin teaches the limitation of the fractional bit plane of an associated enhancement layer reference frame. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wu and Xin as a whole for yield high encoding efficiency and good error recovery during data transmission over the Internet and wireless channels, as disclosed in Xin's paragraph 0014.

The DeBonet reference is used to meet the deficiencies of Wu and Xin. Wu and Xin do not specifically disclose using B frame residuals. In column 12, lines 41-44, DeBonet discloses that element 655 of figure 6 calculates the B frame residuals. DeBonet discloses the frame residuals include B frame residuals. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wu, Xin and De Bonet as a whole for accurately, effectively encode image data for viewing high quality images on high definition televisions, as disclosed in DeBonet's column 3, lines 45-54.

Thus, the rejection is maintained.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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2. Claims 1-36 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5 and 9-12 of copending Application No. 09/793,035. Although the conflicting claims are not identical, they are not patentably distinct from each other because the combination of claims 1 and 3 of the present invention is equivalent to claim 1 of copending Application No. 09/793,035, where Wu (US 6,614,936) can be combined to teach that there can be at least a fractional bit plane, as noted in Wu's fig.9. Similarly, the combination of claims 25 and 27 of the present invention is equivalent to claim 9 of copending Application No. 09/793,035. Also, the combination of claims 13 and 15 of the present invention is equivalent to claim 11 of copending Application No. 09/793,035. And claim 7 of the present invention is almost identical to claim 5 of copending Application No. 09/793,035, claim 19 of the present invention is almost identical to claim 12 of copending Application No. 09/793,035, and claim 31 of the present invention is almost identical to claim 10 of copending Application No. 09/793,035.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 13-24 are written in such a manner that a memory medium can be reasonably interpreted as containing instructions to be listed

as computer program coded language written on a piece of paper. Because of the ambiguous nature of the claims as currently written in the preamble of claims 13-24, claims 13-24 need to be produced in a tangible body, machine readable, and be non-function descriptive material, meaning that a compressed signal needs to be produced by a method, apparatus, arrangement or system. So claims 13-24 need to be cancelled to overcome the 35 U.S.C. 101 rejection. The preamble needs to precisely disclose "a computer-readable medium encoded with computer programmable executable instructions, the computer-readable medium comprising:". See MPEP 706.03(a).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-9, 12-15, 18-21, 24-27, 30-33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (6,614,936) in view of Xin (US 2004/0071358).

Regarding claims 1, 13 and 25, Wu discloses a memory medium, an apparatus and a method of coding video, comprising the steps of:

encoding an uncoded video to generate extended base layer reference frames (see fig.4, note extended base layer reference frames are produced, via "1st Layer", "2nd Layer", "3rd Layer"; also peruse figs.5 and 11-13), each of the extended base layer reference frames including a base layer reference frame and at least a portion of an associated enhancement layer reference frame (fig.4, note each of the extended base

layer reference frames includes data from a base layer, ie. note extended base layer frames 3 and 5 from 1st layer, these frames are generated from a base layer reference frame and at least a portion of an associated enhancement layer reference frame); and generating frame residuals from the uncoded video and the extended base layer reference frames (col.9, ln.59 to col.10, ln.28 and figs.4-5 and 9, note frame residuals are generated from the uncoded video data and the extended base layer from base layer coder 82 and combining enhancement layer 84).

Wu does not specifically disclose the fractional bit plane of an associated enhancement layer reference frame. However, Xin teaches the use of the fractional bit plane of an associated enhancement layer reference frame (fig.10, note the use of fractional bit planes, where BIT-PLANE 0 is one fractional bit plane, BIT-PLANE 1 is a second fractional bit plane, BIT-PLANE 2 is the third fractional bit plane, and BIT-PLANE 3 is the fourth fractional bit plane, where these fractional bit planes of the frame images are encoded according to a layered scheme). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wu and Xin as a whole for yield high encoding efficiency and good error recovery during data transmission over the Internet and wireless channels (Xin paragraph 0014).

Regarding claims 2, 14 and 26, Wu discloses further comprising the step of coding the frame residuals with a scalable codec selected from the group consisting of DCT based codecs or wavelet based codecs to generate enhancement layer frames (col.9, ln.11-16 and ln.42-49).

Regarding claims 3, 15 and 27, Wu discloses further the step of coding the frame residuals with the use of progressive fine granular scalable codec to generate fine granular scalable enhancement layer frames (see col.5, ln.23-33 and col.9, ln.14-21, ln. 54-58).

Regarding claims 6, 18 and 30, Wu discloses wherein the frame residuals further include P frame residuals (col.10, ln.38-47).

Regarding claims 7, 19 and 31, Wu discloses a memory medium, an apparatus and a method of coding video, comprising the steps of:

encoding an uncoded video to generate extended base layer reference frames (see fig.4, note extended base layer reference frames are produced, via “1st Layer”, “2nd Layer”, “3rd Layer”; also peruse figs.5 and 11-13), each of the extended base layer reference frames including a base layer reference frame and at least a portion of an associated enhancement layer reference frame (fig.4, note each of the extended base layer reference frames includes data from a base layer, ie. note extended baser layer frames 3 and 5 from 1st layer, these frames are generated from a base layer reference frame and at least a portion of an associated enhancement layer reference frame); and

generating frame residuals from the uncoded video and the extended base layer reference frames (col.9, ln.59 to col.10, ln.28 and figs.4-5 and 9, note frame residuals are generated from the uncoded video data and the extended base layer from base layer coder 82 and combining enhancement layer 84).

Although Wu does not specifically disclose the use of a decoder for decoding the video, however, it would have been obvious to one of ordinary skill in the art to have a

decoder to decode the encoded video data for viewing the video images at the display. It is clear that Wu must have a decoder otherwise the coding of image data would be pointless if there is no decoder to decode image data for viewing at the display.

Wu does not specifically disclose the fractional bit plane of an associated enhancement layer reference frame. However, Xin teaches the use of the fractional bit plane of an associated enhancement layer reference frame (fig.10, note the use of fractional bit planes, where BIT-PLANE 0 is one fractional bit plane, BIT-PLANE 1 is a second fractional bit plane, BIT-PLANE 2 is the third fractional bit plane, and BIT-PLANE 3 is the fourth fractional bit plane, where these fractional bit planes of the frame images are encoded according to a layered scheme). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wu and Xin as a whole for yield high encoding efficiency and good error recovery during data transmission over the Internet and wireless channels (Xin paragraph 0014).

Regarding claims 8, 20 and 32, Wu discloses further comprising the step of coding the frame residuals with a scalable codec selected from the group consisting of DCT based codecs or wavelet based codecs to generate enhancement layer frames (col.9, ln.11-16 and ln.42-49).

Although Wu does not specifically disclose the use of a decoder for decoding the video, however, it would have been obvious to one of ordinary skill in the art to have a decoder to decode the encoded video data for viewing the video images at the display. It is clear that Wu must have a decoder otherwise the coding of image data would be pointless if there is no decoder to decode image data for viewing at the display.

Regarding claims 9, 21 and 33, Wu discloses generating enhancement layer frames from the frame residuals (col.5, ln.23-33); and generating an enhanced video from the base layer frames and the enhancement layer frames (col.5, ln.23-33, col.9, ln.14-21, ln.54-58 and figs. 4-5 and 11-12).

Regarding claims 12, 24 and 36, Wu discloses wherein the frame residuals further include P frame residuals (col.10, ln.38-47).

Claims 4-5, 10-11, 16-17, 22-23, 28-29 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (6,614,936) and Xin (US 2004/0071358) in view of De Bonet (6,510,177).

Regarding claims 4, 16 and 28, Wu discloses coding the frame residuals (col.9, ln.11-16 and ln.42-49). Wu and Xin do not specifically disclose using B frame residuals. However, De Bonet discloses a method of coding video according to claim 1, wherein the frame residuals include B frame residuals (col.12, ln.41-44 and fig.6, element 655 calculates the B frame residuals). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wu, Xin and De Bonet as a whole for accurately, effectively encode image data for viewing high quality images on high definition televisions (col.3, ln.45-54).

Regarding claims 5, 17 and 29, Wu discloses wherein the frame residuals further include P frame residuals (col.10, ln.38-47).

Regarding claims 10, 22 and 34, Wu discloses coding the frame residuals (col.9, ln.11-16 and ln.42-49). Wu and Xin do not specifically disclose using B frame residuals. However, De Bonet discloses a method of coding video according to claim 1, wherein

the frame residuals include B frame residuals (col.12, ln.41-44 and fig.6, element 655 calculates the B frame residuals). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wu, Xin and De Bonet as a whole for accurately, effectively encode image data for viewing high quality images on high definition televisions (col.3, ln.45-54).

Although Wu does not specifically disclose the use of a decoder for decoding the video, however, it would have been obvious to one of ordinary skill in the art to have a decoder to decode the encoded video data for viewing the video images at the display. It is clear that Wu must have a decoder otherwise the coding of image data would be pointless if there is no decoder to decode image data for viewing at the display.

Regarding claims 11, 23 and 35, Wu discloses wherein the frame residuals further include P frame residuals (col.10, ln.38-47).

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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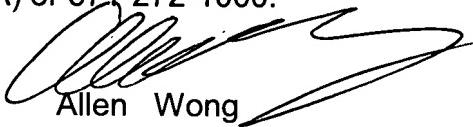
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Groody can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Allen Wong
Primary Examiner
Art Unit 2621

*AW
4/23/07*